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DE 40 07 965 A1 (DE '965); indeed, the present specification utilizes a thirty-minute, 90°C drying step (see page 88, lines 1-2 of the specification). However, it appears that the Examiner assumes that once dry, the adhesive would not be tacky. We submit that adhesives are often tacky when dry, as "dry" adhesive coatings contain residual moisture (consider, e.g., tape adhesives). Thus, we respectfully submit that the "tacky characteristic" imparted by the clay additive as taught in column 2, lines 56-57 of U.S. Pat. No. 4,673,594 (US '594) would not be assumed by one of ordinary skill to be removed by a typical drying step like that described in the present specification because the agent providing the "tacky characteristic" (the clay) is still present after drying, as well as residual moisture. Accordingly, automotive engineers familiar with US '594 would not risk the use of a tacky clay additive in a binder for a motor vehicle radiator coating application, as debris from the road and/or airborne sources could adhere to the tacky radiator, thereby impeding or blocking air flow and interfering with the critical heat-dissipation function of the radiator.

The Examiner suggests that one of ordinary skill would employ the high-temperature/long duration curing step suggested in US '594 (minimum 350°F for "a few" hours, see column 2, lines 48-49) to drive out all of the moisture from the tacky clay-containing binder, thereby removing its tackiness. We respectfully submit that there is no incentive to use such a curing step for the motor vehicle radiator application contemplated in DE '965. First, the high-temperature curing contemplated in US '594 is an expensive and time consuming process as compared to a low temperature/short duration drying step like that disclosed in the present specification. Second, US '594 indicates that a curing step is not needed for applications where the operating temperatures are below 1,000°F (see column 2, lines 49-51). As motor vehicle radiator operating temperatures are typically between 90-100°C (194-212°F), well below 1,000°F, there is simply no incentive for utilizing the expensive and time-consuming curing step disclosed in US '594. Also, while not a concern for the stationary furnace applications contemplated in US '594, a completely moisture-free radiator coating would be far less capable of absorbing the normal vibrations and mechanical shocks expected from motor vehicle operation without flaking.

We again traverse the rejection of claims 1-4 and 6-8 as obvious over DE '965 and U.S. '594, further in view of selected pages of the books entitled Adhesives Handbook ("Shields") and Adhesive Bonding, Techniques and Applications ("Cagle"). Shields teaches that silicone resins provide a "tacky adhesive film" (see page 71, column 2, line 11) and which requires high-

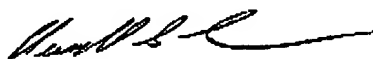
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temperature curing "at 250°C to produce a hard, dry film" (see page 71, column 2, line 27). For the reasons set forth above, tackiness is undesirable in radiator coating applications. Moreover, utilizing a high-temperature curing step to harden the silicone would be cost prohibitive and would create a "hard" coating less capable of absorbing the vibrations and mechanical shocks expected in motor vehicle radiator coating applications. These negatives are amplified by the questionable adhesive qualities of silicone (see page 25, lines 19-20 of Cagle). Further, the filler-enhanced cohesive strength improvements alleged in Shields *require* a cost-prohibitive, durability-reducing curing step ("Cohesive strength of cured resins is often increased by incorporating fillers. . ." emphasis added; see Shields, page 72, column 1, lines 3-5). Thus, we respectfully submit that Shields and/or Cagle fail to provide the legally required incentive for one of ordinary skill in the art to use silicone in the radiator coating application of DE '965.

In summary, the hypothetical combinations of references that the Examiner uses to reject the pending claims would themselves be rejected by those of ordinary skill in the art familiar with radiator coating applications. We therefore respectfully submit that the pending claims define a novel and non-obvious invention that fully merits patent protection, and we request that the entire application be allowed at an early date. If there remain any outstanding issues that the Examiner believes can be addressed through discussion, we cordially invite the Examiner to contact the Applicants' undersigned representative at the telephone number provided below.

This response is being filed within three months of the February 21, 2003 mailing date of the Final Office action. Accordingly, no fee is believed to be required, but if any is required, authorization is hereby granted to charge any such fee to deposit account 05-1070.

Respectfully submitted,



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